

## **5440-36 Early Childhood Education**

*The holder is authorized to teach young children birth through grade three.*

In order to qualify for this endorsement, the candidate shall demonstrate that he/she meets the knowledge and performance standards for professional knowledge of early childhood education, as well as the knowledge and performance standards for the four core content areas as follows:

### **Knowledge Standards – Professional Knowledge:**

**Demonstrates a thorough understanding of the developmental nature and needs of young children from the prenatal stage through middle childhood, and of ways to organize, implement, and assess curriculum and instruction; structure learning environments; and collaborate with families and community organizations to maximize young children's learning and development. Specifically the educator understands:**

The progression of prenatal through middle childhood growth and development within each domain (i.e. cognitive, linguistic, social, physical, and emotional) including:

- The broad theories of child development
- The wide variation in how young children learn and typically develop
- The characteristics and signs of atypical development in young children and the challenges these present to learning and development
- The importance of sensory exploration and play to infants', toddlers', and young children's cognitive, motor, perceptual, linguistic, and social development
- The role of biological, genetic, environmental, and cultural factors in children's development and their impact on exceptionalities
- The importance of secure, responsive relationships and consistency of caregivers to young children's learning and healthy development, including the importance of attachment as a primary marker of healthy development of infants and toddlers
- The role of families as the primary context for young children's development, including the importance of parents' expectations for their children, and how young children's development is affected by and affects parents, siblings, and extended family

Family systems theory and principles of family-centered practice, including how to work cooperatively and respectfully with all families to support children's learning and development

Resources and programs available in the community for the support of young children and their families

Vermont's learning expectations for all children as delineated in current state standards for students and the articulation of those standards for infants, toddlers, and young children<sup>1</sup>.

Curricular design and instructional strategies that build upon children's play and curiosity and engage the unique intellectual and psychosocial nature and needs of young children

Appropriate strategies for assessing young children's learning and development

## **5440-36 Early Childhood Education (Cont'd)**

Music, drama, and the visual arts as expressions of human emotion and culture; powerful forms of communication; and vehicles for enhancing learning opportunities across the curriculum

The importance of physical and psychological environments on young children's growth and development and ways to organize learning environments and orchestrate interactions in order to promote young children's holistic development

Health and safety issues including procedures regarding disease and accident prevention, hygiene, and first aid; the signs of emotional stress, harassment, child abuse and neglect in young children; state and federal laws and regulations pertaining to early childhood educators and programs

### **Performance Standards – Professional Knowledge:**

**Early childhood educators draw upon their knowledge of child development and learning theory; the interests, needs, and backgrounds of their children; their relationships with children's families; and their knowledge of subject matter, integrated curriculum, and appropriate assessment to design and implement developmentally and individually appropriate learning experiences that enable children to explore challenging concepts and develop essential foundational skills in purposeful and engaging ways. Specifically, the educator:**

Demonstrates respect for children's diverse family structures, values, and traditions

Collaborates with parents/caregivers, school, and community personnel to enhance children's learning, growth, and development, including planning and facilitating collaborative conferences and educational programs and helping families to secure appropriate services

Develops an integrated curriculum that grows out of children's interests and questions, incorporates skills and concepts from across the language arts, mathematics, science, social studies, and the arts, reflects culturally valued content and children's home experiences, and addresses all the developmental domains

Implements curriculum using a variety of learning strategies, including play-based and teacher-directed approaches, in order to meet the needs of all young children

Responds to and follows children's leads, including recognizing and supporting child-initiated play both indoors and outdoors, and developing activities to incorporate and extend their individual interests

Integrates the performing and visual arts within the curriculum and facilitates and encourages children's creative expression through a variety of media

Employs a variety of methods to systematically observe, record, monitor, and document young children's activities and behavior for the purpose of planning appropriate and individualized programs, environments, and interactions

Participates with other professionals in developing and implementing individualized service and educational plans for young children with disabilities and ensures that assessments are family sensitive

Complies with state and federal legal and regulatory requirements pertaining to early childhood educators and programs

Plans indoor and outdoor environments that are safe, stimulating, engaging, and intentionally designed to support curricular goals

## **5440-36 Early Childhood Education (Cont'd)**

Anticipates conflicts and orchestrates activities and interactions to promote the prosocial development of young children in the areas of self-awareness, personal responsibility, and respect for self and others, including explicitly modeling how to engage in equitable and respectful conversation and behavior

Implements appropriate hygiene and nutrition procedures and practices, and models the skills essential to healthy choice making

Creates a welcoming environment, including establishing routines to inform parents about their child's day and to assist parents to separate and reunite with their child

Designs and evaluates processes that support children's transitions among and across programs and settings

### **Knowledge Standards – English Language Arts, Mathematics, History/Social Sciences, and Science:**

#### **English Language Arts**

**Demonstrates knowledge of research-based principles and processes underlying literacy development, and the components of effective early literacy instruction, as delineated in current national professional standards<sup>2</sup> and reflected in *Vermont's Framework of Standards and Learning Opportunities*. Specifically, the educator understands and/or knows:**

*Development of Oral Language and Literacy* – Processes, principles, and dimensions of oral language acquisition; the relationship between oral language development and literacy development; the development of emergent and early literacy, including the ways in which creative and active early learning environments provide opportunities for establishing the foundations of literacy; the impact of physical, emotional, and cultural factors on language development and acquisition of reading and writing; role of metacognition in language and literacy development; the elements of effective verbal and non-verbal communication

*Literature and Media* – A wide variety of quality, age-appropriate literature across genres, eras, cultures, and subcultures; literary elements and strategies for textual analysis

*Language and Word Study* – The purposes of language and approaches to analyzing language; the pronunciation of English phonemes and their graphemes; the developmental progression of phonological awareness; vocabulary development and its relationship to literacy acquisition; the developmental stages of spelling and morphological analysis

*Reading Comprehension and Fluency* – Reading as the process of constructing meaning from text; the components of fluency; factors that influence comprehension and fluency; typical elements and features of narrative and expository texts, including typical features of beginner texts, and how readers' awareness of these features supports comprehension; cognitive strategies and instructional approaches for supporting comprehension and fluency of beginning and developing readers

*Written Expression* – Writing as symbolic representation and the stages of early writing development, including drawing; the composing processes that writers use, and planning strategies most appropriate for particular kinds of writing; dimensions of quality writing and types of writing; the conventions of written English; uses of writing portfolios and benchmarks and standards for various age/grade levels

## **5440-36 Early Childhood Education (Cont'd)**

*Assessment and Adaptation of Literacy Instruction* – The importance of individualizing the literacy program to address the needs and strengths of learners; a variety of valid and efficient language arts assessments appropriate for different purposes; the observable characteristics of a variety of reading and writing difficulties; strategies for modifying literacy instruction to support the needs of individual learners, including English Language Learners (ELL's)

### Mathematics

**Demonstrates knowledge of mathematical content, concepts, and skills delineated in current national professional standards<sup>3</sup> and in *Vermont's Framework of Standards and Learning Opportunities* including:**

National Council of Teachers of Mathematics (NCTM) process skills as vehicles for acquiring and using mathematics content knowledge

Essential early numeracy concepts and their development, and typical misconceptions in mathematical reasoning held by young children

Specific content in the areas of number and operations; algebra and functions; geometry and measurement; and, data analysis, statistics, and probability, recommended for elementary teachers in *The Mathematical Education of Teachers* (2001, Conference Board of the Mathematical Sciences)

### History and the Social Sciences

**Demonstrates knowledge of historical and social science content, concepts, and skills in the areas of development of children's historical thinking; history; cultural geography; diversity, unity, identity, and interdependence; and citizenship as delineated in current national professional standards<sup>4</sup>, in *Vermont's Framework of Standards and Learning Opportunities*.**

### Science

**Demonstrates knowledge of scientific content, concepts, and skills in the areas of development of children's scientific thinking; the scientific inquiry process; life sciences; physical sciences; Earth, environmental, and atmospheric sciences; and living and non-living systems, as delineated in current national professional standards<sup>5</sup> and in *Vermont's Framework of Standards and Learning Opportunities*.**

### Performance Standards – English Language Arts:

**Creates a literacy environment and implements a language arts curriculum that fosters interest and growth in all aspects of oral and written literacy in order to provide children with the communication skills necessary to understand and influence their own lives and to learn about the world. Specifically, the educator:**

*Literacy Development through Literature and Media* –

Makes easily accessible to children a wide variety of engaging, age-appropriate fiction and non-fiction textual materials, including picture books, "big books", and chapter books

Selects and reads quality literature aloud and applies tools of literary analysis to the facilitation of discussions of central themes and ideas

**5440-36 Early Childhood Education (Cont'd)**

Uses active instructional strategies to support emergent and early literacy

Implements strategies to include parents as partners in their children's literacy development

*Language and Word Study –*

Engages in one-on-one and small group dialogue with children about their ideas, activities, interests, and motivations in order to promote oral language development and model conversational skills

Uses a variety of explicit and interactive approaches to teach key aspects of word study such as phonemic awareness, print concepts, and decoding

Teaches children to use syntactic, semantic, and graphophonemic cues to identify and spell words

Employs effective instructional strategies for the development of a broad vocabulary

*Reading Comprehension and Fluency –*

Provides explicit instruction in how to flexibly use pre-, during, and post-reading cognitive strategies to understand, analyze, and interpret a variety of types of texts

Employs a range of instructional approaches to support comprehension across the content areas

Uses instructional strategies to build or strengthen fluency

*Written Expression –*

Encourages drawing as a precursor for written expression

Provides multiple opportunities for beginning writers to learn that print carries meaning (e.g., by demonstrating for children the connections between their illustrations and words), to use writing purposefully, and to explore sound-symbol relations

Organizes and implements a writing portfolio program that promotes high quality writing by including a variety of instructional strategies and topics to teach purposes, structures, and composition

Uses required writing rubrics and benchmarks for assessing children's writing and teaches children to use these to analyze their own writing

Models and teaches appropriate grammar, usage, and mechanics

Implements strategies to build fluency, accuracy, and automaticity in handwriting to support composition

*Assessment and Adaptation of Literacy Instruction –*

Uses a variety of valid assessment strategies (including records of oral reading) to regularly evaluate children's progress in all of the individual dimensions of literacy development

Uses the results of literacy assessments to adjust and/or target instruction, to flexibly group children, when needed, and to appropriately match children with reading material

**5440-36 Early Childhood Education (Cont'd)**

**Performance Standards – Mathematics, History and the Social Sciences, and Science:**

**Implements inquiry-based mathematics, history/social sciences, and science curricula that integrate skills and content and enable conceptual development and development of the habits of mind that support inquiry within each discipline. Specifically, the educator:**

Mathematics

Anticipates, elicits, and corrects typical misconceptions in mathematical reasoning

Models the habits of mind of flexibility and perseverance that support mathematical learning

Employs a range of instructional activities and resource materials to support the development of early numeracy concepts, and to reveal the application of mathematics to everyday life

Designs and incorporates mathematical tasks/activities that capitalize upon children's intuitive insights and language and that enable children to investigate, explore, and discover structures and relationships; create and use mathematical models; apply informal strategies to solve mathematical problems; formulate and solve problems individually and collaboratively; and justify and communicate their conclusions orally and in writing

Communicates mathematical ideas using appropriate mathematical language and representations, and teaches children to use both to communicate about mathematical ideas

Uses required mathematics scoring guides and benchmarks to evaluate student work and teaches students to use both to evaluate their own work

History and Social Sciences

Incorporates activities that enable children to make connections between themselves and the larger world, including sharing and experiencing different cultures and traditions, and exploring the relationship between people and their environments

Designs and implements activities that use children's own stories as a way to introduce the chronological thinking essential to historical thinking

Provides opportunities for children to learn about their communities through active learning strategies (e.g., building classroom systems based on real-life systems such as a barter economy or postal system), to participate in community-based investigations and service projects, and to access and use local historical resources

Provides opportunities for children to explore and use historical, geographical, and social science tools and methods

Science

Anticipates and elicits the naïve scientific ideas, emerging concepts, and/or misconceptions that young children are likely to have prior to instruction

Models the skills and habits of mind inherent in scientific inquiry

## **5440-36 Early Childhood Education (Cont'd)**

Provides opportunities for children to raise questions, become aware of the scientific nature of their questions, and to investigate their questions using the scientific method

Designs a variety of activities that allow children to build on their own intuitive explanations of how things work, as they acquire more sophisticated scientific understandings

Creates opportunities for children to collaboratively design and implement scientific investigations, and to present and discuss the results of their investigations

Conducts investigations according to safe scientific procedures

Integrates scientific tools appropriate to children's ages and abilities in order to facilitate inquiry

Demonstrates sensitivity to inequities in science and mathematics teaching by incorporating specific instructional strategies that promote equity

### Additional Requirements:

A minimum of a practicum, or the equivalent, in early childhood education at the birth-to-5 and/or 5-8 age levels, depending on the authorization sought. For the full birth through grade three authorization, a minimum of a practicum, or the equivalent, in early childhood education at **both** the birth-to-5 and 5-8 age levels is required.

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<sup>1</sup> *Vermont Early Learning Standards: Guiding the Development and Learning of Children Entering Kindergarten.* (Vermont Department of Education Early Childhood Work Group, Fall, 2003)

<sup>2</sup> e.g., *Standards for Reading Professionals* (International Reading Association, 1998); *Every Child Reading: A Professional Development Guide* (Learning First Alliance, 2000); *Standards for the English Language Arts* (International Reading Association/National Council of Teachers of English, 1996)

<sup>3</sup> e.g. *The Mathematical Education of Teachers* (Conference Board of the Mathematical Sciences, 2001), *Principles and Standards for School Mathematics* (National Council of Teachers of Mathematics, 2000)

<sup>4</sup> e.g., *National Standards for History* (National Center for History in the Schools, 1996), *Curriculum Standards for Social Studies* (National Council for the Social Studies, 1994), *Geography for Life* (National Geographic Research & Exploration, 1994)

<sup>5</sup> e.g. *National Science Education Standards* (National Academy of Sciences, 1996), *Benchmarks for Science Literacy* (Oxford University Press, 1993)